



## NUCLEAR REGULATORY COMMISSION

[NRC-2012-0110]

### An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications

**AGENCY:** Nuclear Regulatory Commission.

**ACTION:** Regulatory guide; issuance.

**SUMMARY:** The U.S. Nuclear Regulatory Commission (NRC) is issuing Revision 2 to Regulatory Guide (RG) 1.177, “An Approach for Plant-Specific, Risk-Informed Decisionmaking: Technical Specifications.” Revision 2 of RG 1.177 includes guidance to develop risk-informed applications for technical specification (TS) changes that considers engineering issues and applies risk insights. It provides guidance acceptable to the staff for using risk information to evaluate changes to nuclear power plant TS completion times (CTs), surveillance frequencies (SFs) and to assess the impact of such proposed changes on the risk associated with plant operation. In addition, it supplements RG 1.174, Revision 3, “An Approach for Using Probabilistic Risk Assessment in Risk-Informed Decisions on Plant-Specific Changes to the Licensing Basis,”.

**DATES:** Revision 2 to RG 1.177 is available on [INSERT DATE OF PUBLICATION IN THE *FEDERAL REGISTER*].

**ADDRESSES:** Please refer to **Docket ID NRC-2012-0110** when contacting the NRC about the availability of information regarding this document. You may obtain publicly available information related to this document using any of the following methods:

- **Federal Rulemaking Web Site:** Go to <https://www.regulations.gov> and search for **Docket ID NRC-2012-0110**. Address questions about Docket IDs in Regulations.gov to Jennifer Borges; telephone: 301-287-9127; e-mail:

Jennifer.Borges@nrc.gov. For technical questions, contact the individuals listed in the **FOR FURTHER INFORMATION CONTACT** section of this document.

- **NRC's Agencywide Documents Access and Management System**

**(ADAMS):** You may obtain publicly available documents online in the ADAMS Public Documents collection at <https://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov).

- **Attention:** The PDR, where you may examine and order copies of public documents, is currently closed. You may submit your request to the PDR via e-mail at [pdr.resource@nrc.gov](mailto:pdr.resource@nrc.gov) or call 1-800-397-4209 or 301-415-4737, between 8:00 a.m. and 4:00 p.m. (EST), Monday through Friday, except Federal holidays.

Revision 2 to RG 1.177 and the regulatory analysis may be found in ADAMS under Accession Nos. ML20164A034 and ML19206A493, respectively.

Regulatory guides are not copyrighted, and NRC approval is not required to reproduce them.

**FOR FURTHER INFORMATION CONTACT:** Gary Wang, telephone: 301-415-1686, e-mail: [Zeechung.Wang@nrc.gov](mailto:Zeechung.Wang@nrc.gov); or Harriet Karagiannis, telephone: 301-415-2493, e-mail: [Harriet.Karagiannis@nrc.gov](mailto:Harriet.Karagiannis@nrc.gov). Both are staff of the Office of Nuclear Regulatory Research, U.S. Nuclear Regulatory Commission, Washington DC 20555-0001.

**SUPPLEMENTARY INFORMATION:**

**I. Discussion**

The NRC is issuing a revision to an existing guide in the NRC's "Regulatory Guide" series. This series was developed to describe and make available to the public information regarding methods that are acceptable to the NRC staff for implementing specific parts of the agency's regulations, techniques that the NRC staff uses in

evaluating specific issues or postulated events, and data that the NRC staff uses in its review of applications for permits and licenses.

Revision 2 of RG 1.177 was issued with a temporary identification of Draft Regulatory Guide, DG-1287. It updates the application of the defense-in-depth philosophy to be consistent with the philosophy described in RG 1.174, which was revised in 2018 to expand the meaning of, and the process for, assessing defense-in-depth considerations. Specifically, this revision of RG 1.177 references the defense-in-depth guidance in the revised RG 1.174 with respect to several staff regulatory positions. Additionally, the staff revised this guide to (1) adopt the terms “PRA acceptability,” and related phrasing variants, instead of terms such as “PRA quality,” and “PRA technical adequacy,” and “technical adequacy” to describe the appropriateness of the probabilistic risk analysis (PRA) used to support risk informed licensing submittals, (2) update Section 2.3, “Evaluation of Risk Impact,” of RG 1.177 by removing information that was repeated from RG 1.174 (e.g., discussion of the ASME/ANS PRA standard) and, in its place, incorporated a direct reference to RG 1.174, Revision 3, and (3) delineate the difference between temporary CT extensions and permanent CT extensions of TSs or maximum backstop CTs.

## **II. Additional Information**

The NRC published a notice of the availability of DG-1287 (ADAMS under Accession No. ML19206A489), in the *Federal Register* on February 19, 2020 (85 FR 9484) for a 60-day public comment period. The public comment period closed on April 20, 2020, and the NRC received two comment documents. Public comments on DG-1287 and the staff responses to the public comments are available in ADAMS under Accession No. ML20191A231.

## **II. Congressional Review Act**

This RG is a rule as defined in the Congressional Review Act (5 U.S.C. 801-808). However, the Office of Management and Budget has not found it to be a major rule as defined in the Congressional Review Act.

### **III. Backfitting, Forward Fitting, and Issue Finality**

RG 1.177, Revision 2 provides updated guidance for power reactor applicants and licensees regarding the use of the defense-in-depth philosophy with other recently updated guidance and would make other conforming changes to the use of PRA and associated terminology. Issuance of this RG does not constitute backfitting or forward fitting or affect issue finality as further discussed in this notice.

Current or future applicants are not, with limited exceptions not applicable here, within the scope of the backfitting and issue finality regulations and forward fitting policy. Applicants are not, with certain exceptions, covered by either the backfit rule or any issue finality provisions under part 52 of title 10 of the *Code of Federal Regulations* (10 CFR). This is because neither the backfit rule nor the issue finality provisions under 10 CFR part 52, with certain exclusions further discussed, were intended to apply to every NRC action which substantially changes the expectations of current and future applicants.

The exceptions to the general principle are applicable whenever an applicant references a 10 CFR part 52 license (e.g., an early site permit) and/or NRC regulatory approval (e.g., a design certification rule) with specified issue finality provisions or a construction permit under 10 CFR part 50. The staff does not, at this time, intend to impose the positions represented in the RG in a manner that would constitute backfitting or affect the issue finality of a part 52 approval. If, in the future, the staff seeks to impose a position in the RG in a manner that constitutes backfitting or does not provide issue finality as described in the applicable issue finality provision, then the staff would need to address the backfit rule or the criteria for avoiding issue finality as described in the applicable issue finality provision.

The staff does not, at this time, intend to impose the positions represented in the RG in a manner that would constitute forward fitting. If, in the future, the staff seeks to impose a position in the RG in a manner that constitutes forward fitting, then the staff would need to address the forward fitting criteria in Management Directive 8.4,

“Management of Backfitting, Forward Fitting, Issue Finality, and Information Requests”

(ADAMS Accession No. ML18093B087).

Dated: January 13, 2020.

For the Nuclear Regulatory Commission.

Meraj Rahimi, Chief,  
Regulatory Guidance and Generic Issues  
Branch,  
Division of Engineering,  
Office of Nuclear Regulatory Research.

[FR Doc. 2021-01154 Filed: 1/19/2021 8:45 am; Publication Date: 1/21/2021]